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- of Bipolar Radiofrequency Ablation for Atrial Fibrillation: Early Results Nahush A. Mokadam, MD, Patrick M. McCarthy, MD, A. Marc Gillinov, MD, William H. Ryan, MD, Marc R. Moon, MD, Michael J. Mack, MD, Sydney L. Gaynor, MD, Sunil M. Prasad, MD, Samuel A. Wickline, MD, Marci S. Bailey, RN, Nicholas R. Damiano, Yosuke Ishii, MD, Richard B. Schuessler, PhD, and Ralph J. Damiano, Jr, MD
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- 1678 Ventricular Resynchronization by Multisite Pacing Improves Myocardial Performance in the Postoperative Single-Ventricle Patient Emile A. Bacha, MD, Frank J. Zimmerman, MD, Victor Mor-Avi, MD, PhD, Lynn Weinert, BS, Joanne P. Starr, MD, Lissa Sugeng, MD, and Roberto M. Lang, MD
- 1684 Postpericardiotomy Syndrome
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- 1688 Improving Outcomes in Functional Single Ventricle and Total Anomalous Pulmonary Venous Connection Andrew J. Lodge, MD, Jack Rychik, MD, Susan C. Nicolson, MD, Richard F. Ittenbach, PhD, Thomas L. Spray, MD, and J. William Gaynor, MD
- 1696 Associated Factors and Trends in Outcomes of Interrupted Aortic Arch Thomas Oosterhof, MS, Anthony Azakie, MD, Robert M. Freedom, MD, William G. Williams, MD, and Brian W. McCrindle, MD, MPH
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- 1710 Basal Metabolic State of Hearts of Patients With Congenital Heart Disease: The Effects of Cyanosis, Age, and Pathology Paul Modi, FRCS, M.-Saadeh Suleiman, DSc, Barnaby C. Reeves, PhD, Ash Pawade, FRCS, Andrew J. Parry, FRCS, Gianni D. Angelini, FRCS, and Massimo Caputo, MD
- 1717 Open Heart Surgery for Small Children Without Homologous Blood Transfusion by Using Remote Pump Head System Makoto Ando, MD, Yukihiro Takahashi, MD, and Natsuko Suzuki, MD
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ORIGINAL ARTICLES: GENERAL THORACIC

- of the Lung 3 Centimeters or Less in Diameter: A Prognostic Assessment Hiroyuki Sakurai, MD, Yoh Dobashi, MD, Eiki Mizutani, MD, Hirochika Matsubara, MD, Shoji Suzuki, MD, Kunio Takano, MD, Shunya Shindo, MD, and Masahiko Matsumoto, MD, PhD
- 1734 SCCRO Expression Correlates
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 Ronald A. Ghossein, MD, Simon G. Talbot, MD,
 Michael Hezel, BS, Maria E. Dudas, BS, Michael
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- 1742 Personal Experience in
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- 1748 Arterial Invasion Predicts Early Mortality in Stage I Non-Small Cell Lung Cancer Taine T. V. Pechet, MD, Shamus R. Carr, MD, Joshua E. Collins, BS, Herbert E. Cohn, MD, and John L. Farber, MD

Invited Commentary Donald Low, MD 1755 Frozen Section Diagnoses of
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Paul H. Schipper, MD, and Francis C. Nichols III,
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- 1761 Feasibility and Results of
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- 1769 Intrapleural Hyperthermic
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Invited Commentary Roger A. Vertrees, PhD, CCP, and Joseph B. Zwischenberger, MD

- 1774 Pleural Biopsy: A Reliable Method for Determining the Diagnosis But Not Subtype in Mesothelioma Raphael Bueno, MD, Jason Reblando, BA, Jonathan Glickman, MD, PhD, Michael T. Jaklitsch, MD, Jeanne M. Lukanich, MD, and David J. Sugarbaker, MD
- 1777 Endoscopic Mucosal Resection as a Staging Technique to Determine the Depth of Invasion of Esophageal Adenocarcinoma Mary S. Maish, MD, and Steven R. DeMeester, MD
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- 1790 ERBB2 Amplifications in
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- 1801 Long-Term Results of Thoracoscopic Sympathectomy for Hyperhidrosis Pascal Dumont, MD, Alexandre Denoyer, MD, and Patrick Robin, MD

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1814 New Intraluminal Coronary Shunt Tube for Off-Pump Coronary Artery Bypass Grafting Fuyuhiko Yasuda, MD, PhD, Manabu Okabe, MD, PhD, Mitsuteru Handa, MD, Atsushi Takamori, MD, Tomoaki Suzuki, MD, Chiaki Kondo, MD, PhD, and Takazumi Nakamura, MD, PhD

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- e81 Surgical Management of Complications of Percutaneous Coronary Rotational Atherectomy Interventions Prem S. Shekar, MD, Marzia Leacche, MD, Kyle A. Farnam, BS, Charles G. Hernandez, BS, Gregory S. Couper, MD, and John G. Byrne, MD
- Pacemaker Lead Thrombosis
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- Treatment of Iatrogenic
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- 1818 Intercontinental LVAS Patient Transport
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- 1821 Regurgitation of the Native Aortic Valve Caused by Thrombus Formation After Heterotopic Heart Transplantation Omar Mangoush, FRCS, Toufan Bahrami, MD, Fabio De Robertis, MD, Jonathan Swinburn, MRCP, Nicholas Banner, FRCP, Magdi H. Yacoub, FRCS, and Asghar Khaghani, FRCS
- 1823 Giant Left Ventricular
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- 1825 Mitral Valve Replacement in a Patient With a Collapsed Lung and a Giant Abscess Tetsuya Horai, MD, Keita Tanaka, MD, and Makoto Takeda, MD
- 1827 Aortopulmonary Fistula Due to Perforation of the Aortic Wall of a Freestyle Stentless Valve Yoichi Kameda, MD, Kazumi Mizuguchi, MD, Toshiyuki Kuwata, MD, Tohru Mori, MD, and Shigeki Taniguchi, MD
- 1829 Surgery for Anomalous Origin of the Right Coronary Artery From the Left Aortic Sinus Selwyn O. Rogers, Jr, MD, Marzia Leacche, MD, Tomislav Mihaljevic, MD, James D. Rawn, MD, and John G. Byrne, MD
- 1831 Severe Stenosis of Anastomoses by
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- 1836 Prandial Atrial Fibrillation:
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- 1838 Use of Saphenous Vein Graft in Axillary Artery Cannulation Mahmoud Loubani, FRCSI, Jitendra M. Parmar, FRCS, Nick W. Clowes, FRCA, and Qamar Abid, FRCS(CTh)
- 1839 A Case of Pulmonary Artery Sling Associated With Long-Segment Funnel Trachea and Bronchus Suis Tsvetomir Loukanov, MD, Christian Sebening, MD, Wolfgang Springer, MD, and Siegfried Hagl, MD, PhD
- 1842 Alveolar Adenoma
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- 1844 Video-Assisted Thoracoscopic Wedge Resection for Pulmonary Sequestration Tsutomu Sakuma, MD, PhD, Makoto Sugita, MD, PhD, Motoyasu Sagawa, MD, PhD, Masanobu Ishigaki, MD, PhD, and Hirohisa Toga, MD, PhD
- 1846 Cavernoscopic Removal of a Fungus
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- 1849 Congenital Membranous
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- 1850 Intrathoracic Giant Lipoma Morris Beshay, MD, and Ralph A. Schmid, MD

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- 1851 Partial Translocation for Repair of Left Ventricular Rupture After Mitral Valve Replacement Hitoshi Yaku, MD, PhD, Yasuyuki Shimada, MD, PhD, Yoshiaki Yamada, MD, Kyoko Hayashida, MD, Atsushi Fukumoto, MD, Taiji Watanabe, MD, and Nobuo Kitamura, MD, PhD
- 1854 Konno Procedure Using Atrioventricular Groove Patch Plasty After Arterial Switch Operation Yoshimichi Kosaka, MD, Hiromi Kurosawa, MD, and Masayoshi Nagatsu, MD
- 1856 Systematic Traction Techniques in Minimal-Access Pediatric Cardiac Surgery Hiroshi Oiwa, MD, Ryoichi Ishida, MD, and Kenichi Sudo, MD

1858 Video-Assisted Thoracic Surgery
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1861 Hybrid Coronary Revascularization in the Era of Drug-Eluting Stents Gavin J. Murphy, FRCS, Alan J. Bryan, FRCS, and Gianni D. Angelini, FRCS

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1878 Graft Occlusion After Deployment of the Aortic Connector Symmetry System: Is Anticoagulation a Necessity? Klaus Matschke, MD, Utz Kappert, MD, and Jens Schneider, MD

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Reply Friedrich S. Eckstein, MD

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1879 Repair of Barlow's Mitral
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1880 Acute Renal Injury and Lowest Hematocrit During Cardiopulmonary Bypass: Not Only a Matter of Cellular Hypoxemia Marco Ranucci, MD, Lorenzo Menicanti, MD, and Alessandro Frigiola, MD

Reply Madhav Swaminathan, MD, Barbara G. Phillips-Bute, PhD, and Mark Stafford-Smith, MD 1882 Protection of a Surgeon
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MD, PhD, Thomas N. Masters, PhD,
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Reply Gregory Trachiotis, MD, and E. Pendleton Alexander, MD

1883 Concomitant Carotid Endarterectomy and Off-Pump Coronary Revascularization Raúl García-Rinaldi, MD, PhD, FACS, and Hernán Cruz, MD

1883 Double-Flap Technique for Repair of Anomalous Origin of Right Pulmonary Artery From Ascending Aorta Edvin Prifti, MD, Massimo Bonacchi, MD, Vittorio Vanini, MD, and Fabio Bartolozzi, MD

1884 Pitfalls in the Measurement of Serum VEGF in Children With Congenital Heart Disease Elisa Arena, MD, and Simone Ferrero, MD

Reply Yoshio Ootaki, MD, PhD, Masahiro Yamaguchi, MD, PhD, Naoki Yoshimura, MD, PhD, Shigeteru Oka, MD, PhD, Masahiro Yoshida, MD, and Tomomi Hasegawa, MD

1886 Successful Repair of Tetralogy of Fallot With Aortic Valvular Stenosis Kenny K. Wong, MD, FRCPC, Suvro S. Sett, MD, FRCSC, and Derek G. Human, MRCP(UK), FRCPC

Reply Olivier Ghez, MD, Bernard Kreitmann, MD, and Dominique Metras, MD

1887 Should Lobectomy Ever Be the First Choice for Patients With Small Pulmonary Lesions? Davide Sortini, MD, Carlo V. Feo, MD, Paolo Carcoforo, MD, Giovanni Carrella, MD, Enzo Pozza, MD, and Andrea Sortini, MD

1888 The Diagnostic Approach to Mediastinal Masses Prasad R. Koduri, MD

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1898 Medium-Term Follow-Up
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1903 Repeat FDG-PET After
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MD, MPH, and Alfred A. Bartolucci, PhD

Invited Commentary W. Roy Smythe, MD

1910 Accuracy of Helical CT in the Detection of Pulmonary Metastases: Is Intraoperative Palpation Still Necessary? Alden M. Parsons, MD, Frank C. Detterbeck, MD, and Leonard A. Parker, MD

1919 Isolated Lung Perfusion With
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MD, PhD, Sander Romijn, MD, Eric Van Marck,
MD, PhD, and Paul E. Y. Van Schil, MD, PhD

1928 Clinicopathological Analysis of Pulmonary Sclerosing Hemangioma Akira Iyoda, MD, Kenzo Hiroshima, MD, Mitsutoshi Shiba, MD, Yukiko Haga, MD, Yasumitsu Moriya, MD, Yasuo Sekine, MD, Kiyoshi Shibuya, MD, Toshihiko Iizasa, MD, and Takehiko Fujisawa, MD

- 1932 Endobronchial Gene Transfer of Soluble Type I Interleukin-1 Receptor Ameliorates Lung Graft Ischemia-Reperfusion Injury Tsutomu Tagawa, MD, Sekhar Dharmarajan, MD, Makio Hayama, MD, Takaaki Ishiyama, MD, Takashi Suda, MD, Hideki Itano, MD, and G. Alexander Patterson, MD, FRCS(C)
- 1940 Recovery of Chronic Renal Impairment With Sirolimus After Lung Transplantation Federico Venuta, MD, Tiziano De Giacomo, MD, Erino A. Rendina, MD, Serena Quattrucci, MD, Edoardo Mercadante, MD, Giuseppe Cimino, MD, Moshen Ibrahim, MD, Daniele Diso, MD, Alessandra Bachetoni, MD, and Giorgio F. Coloni, MD
- 1944 Bone Marrow Micrometastases and Markers of Angiogenesis in Esophageal Cancer Gary M. Spence, MD, Alastair N. J. Graham, MD, Kathleen Mulholland, MRC(Path), Perry Maxwell, PhD, W. Glenn McCluggage, MD, James M. Sloan, MD, and James A. McGuigan, FRCS

Invited Commentary Masaki Tomita, MD

ORIGINAL ARTICLES: CARDIOVASCULAR

- 1951 Outcome of Right Ventricle-to-Pulmonary Artery Shunt in First-Stage Palliation of Hypoplastic Left Heart Syndrome: A Multi-Institutional Study Shunji Sano, MD, Kozo Ishino, MD, Hideaki Kado, MD, Yuichi Shiokawa, MD, Kisaburo Sakamoto, MD, Michio Yokota, MD, and Masaaki Kawada, MD
- 1959 Right Ventricle to Pulmonary
 Artery Conduit Reduces Interim
 Mortality After Stage 1 Norwood
 for Hypoplastic Left Heart Syndrome
 Christian Pizarro, MD, Tomasz Mroczek, MD,
 Edward Malec, MD, PhD, and William I.
 Norwood, MD, PhD
- 1965 Midterm Ventricular Performance After Norwood Procedure With Right Ventricular-Pulmonary Artery Conduit Yoshihisa Tanoue, MD, Hideaki Kado, MD, Yuichi Shiokawa, MD, Naoki Fusazaki, MD, and Shiro Ishikawa, MD

Invited Commentary Ralph S. Mosca, MD 1972 Risk Factors for Readmission
After Neonatal Cardiac Surgery
Andrew S. Mackie, MD, Kimberlee Gauvreau,
ScD, Jane W. Newburger, MD, John E. Mayer,
MD, and Lars C. Erickson, MD

Invited Commentary Wan Li, MD

1979 New Onset Arrhythmias After
the Extracardiac Conduit Fontan
Operation Compared With the
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Procedure: Early and Midterm Results
Jan Hendrik Nürnberg, MD, Stanislav Ovroutski,
MD, Vladimir Alexi-Meskishvili, MD, PhD,
Peter Ewert, MD, PhD, Roland Hetzer, MD, PhD,
and Peter. E. Lange, MD, PhD

Invited Commentary Scott M. Bradley, MD

1989 Primary Repair for Aortic Arch Obstruction Associated With Ventricular Septal Defect Martin Kostelka, MD, PhD, Thomas Walther, MD, PhD, Imke Geerdts, MD, Ardawan Rastan, MD, Stefan Jacobs, MD, Ingo Dähnert, MD, Herbert Kiefer, MD, Wilfried Bellinghausen, MD, and Friedrich W. Mohr, MD, PhD

Invited Commentary Ralph S. Mosca, MD

1994 Interim Mortality in Pulmonary
Atresia With Intact Ventricular Septum
Kathleen N. Fenton, MD, Frank A. Pigula, MD,
Sanjiv K. Gandhi, MD, Linda Russo, MD, and
Kim F. Duncan, MD

Invited Commentary Marjan Jahangiri, FRCS

1999 Impaired Endothelial Function of the Umbilical Artery After Fetal Cardiac Bypass Yasuhisa Oishi, MD, Munetaka Masuda, MD, Toru Yasutsune, MD, Noriko Boku, MD, Shigehiko Tokunaga, MD, Shigeki Morita, MD, and Hisataka Yasui, MD

Invited Commentary Markus K. Heinemann, MD, PhD

2005 The Effect of Bilateral Internal
Thoracic Artery Grafting on
Survival During 20 Postoperative Years
Bruce W. Lytle, MD, Eugene H. Blackstone, MD,
Joseph F. Sabik, MD, Penny Houghtaling, MS,
Floyd D. Loop, MD, and Delos M. Cosgrove, MD

2015 Outcomes After Usage of a Quality
Initiative Program for Off-Pump
Coronary Artery Bypass Surgery: A
Comparison With On-Pump Surgery
Sherif R. Gobran, MD, PhD, Scott Goldman, MD,
Francis Ferdinand, MD, Mary Ann Wertan, RN,
Candace Trace, RN, Gary L. Grunkemeier, PhD,
YingXing Wu, MD, and Francis P. Sutter, DO

Invited Commentary Fred Edwards, MD

2022 Development of a Score to Predict the Need for Coronary Artery Bypass Graft Surgery in Patients With Non-ST Segment Elevation Acute Coronary Syndromes Santiago Garcia, MD, Mariana J. Canoniero, MD, Julio A. Chirinos, MD, Eduardo de Marchena, MD, Tomas Salerno, MD, and Alexandre Ferreira, MD

> Invited Commentary Verdi J. DiSesa, MD

2028 Factors Associated With
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Invited Commentary Yvon Baribeau, MD, and Benjamin M. Westbrook, MD

2033 Early and Mid-Term Outcome of Anastomosis of Gastroepiploic Artery to Left Coronary Artery Kenji Takahashi, MD, Kazuyuki Daitoku, MD, Sei Nakata, MD, Shigeru Oikawa, MD, Masahito Minakawa, MD, and Norihiro Kondo, MD

> Invited Commentary George M. Palatianos, MD

2037 Concomitant Carotid Endarterectomy and Coronary Bypass Surgery: Outcome of On-Pump and Off-Pump Techniques Yugal Mishra, PhD, Harpreet Wasir, MCh, Vijay Kohli, MCh, Zile Singh Meharwal, MCh, Rajneesh Malhotra, MCh, Yatin Mehta, MD, and Naresh Trehan, MD

> Invited Commentary Michael A. Borger, MD

2044 Off-Pump Coronary Artery Bypass
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2050 Routine Use of Bilateral
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Sousa Uva, MD, Gilles Boccara, MD, and Philipe
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2054 Flow in Coronary Bypass
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and Thomas A. Schmidt, MD, DMSc

2057 Hemodynamic Changes During
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Kim, MD

2063 Annular Geometry and Motion in Human Ischemic Mitral Regurgitation: Novel Assessment With Three-Dimensional Echocardiography and Computer Reconstruction Rashid M. Ahmad, MD, A. Marc Gillinov, MD, Patrick M. McCarthy, MD, Eugene H. Blackstone, MD, Carolyn Apperson-Hansen, MS, Jian Xin Qin, MD, Deborah Agler, RCDS, Takahiro Shiota, MD, and Delos M. Cosgrove, MD

> Invited Commentary Thomas Orszulak, MD

2069 Tricuspid Valve Repair:

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 William Piccione, Jr, MD, William L. Holman,
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